Title
Urethral lichen sclerosus under the microscope: a survey of academic pathologists

Permalink
https://escholarship.org/uc/item/21s5r4cd

Journal
CANADIAN JOURNAL OF UROLOGY, 25(3)

ISSN
1195-9479

Authors
Erickson, BA
Tesdahl, BA
Voznesensky, MA
et al.

Publication Date
2018-06-01

Peer reviewed
MP11-02
URETHRAL LICHEN SCLEROSUS UNDER THE MICROSCOPE
Brennan Tesdahl*, Maria Voznesensky, Iowa City, IA; Nejd Alsikafi, Maywood, IL; Benjamin Breyer, San Francisco, CA; Joshua Broghammer, Kansas City, KS; Jill Buckley, San Diego, CA; Sean Elliott, Minneapolis, MN; Christopher McClung, Columbus, OH; Jeremy Myers, Salt Lake City, UT; Thomas Smith III, Houston, TX; Alex Vanni, Burlington, MA; Bryan Voelzke, Seattle, WA; Lee Zhao, New York City, NY; William Brant, Salt Lake City, UT; Bradley Erickson, Iowa City, IA

INTRODUCTION AND OBJECTIVES: Lichen sclerosus (LS) is an inflammatory dermatologic condition that involves squamous epithelium. Genitourinary LS (GLS), historically known as balanitis xerotica obliterans (BXO), is thought to involve the urethra, a stratified/pseudostratified columnar and urothelial lined organ. Given the poor understanding of the pathophysiology of LS and a lack of accepted definitive diagnostic criteria, we proposed to survey pathologists regarding their understanding of LS. We hypothesized that significant disagreement about GLS will exist.

METHODS: All urologists participating in the Trauma and Urologic Reconstruction Network of Surgeons identified genitourinary (GUP) and dermatopathologists (DP) at their respective institutions who were then invited to participate in an online survey regarding their experience with diagnosing LS, LS pathophysiology and its relationship to urethral stricture disease. Statistical comparisons between responses provided by DPs and GUPs were performed using the Fischer's exact test.

RESULTS: There were 23 (12 DP, 11 GUP) pathologists that completed the survey. Overall, 90% still use BXO when describing GLS and 66% require a clinical history. The most agreed upon criteria for diagnosis were dermal collagen homogenization (85.7%), loss of the normal rete pattern (33.3%) and atrophic epididymis (28.5%) - thus no single criteria was deemed necessary for diagnosing GLS by all pathologists. Only 1 pathologist routinely graded LS severity. The average number required findings for diagnosis was 2.1±1.09 (GUP 2.1±1.27 v DP 2.1±1.0; p = 0.96). No pathologists believed GLS had an infectious etiology (19% maybe, 42% unknown) and 19% believed GLS to be an autoimmune disorder (42% maybe, 38% unknown); 19% believed LS to be premalignant, but 52% believed it was associated with cancer; 80% believed that LS could involve the urethra (DP 92%) v GUP (67%); p = 0.272). Of those diagnosing urethral GLS, 80% of DUP believed that GLS must first involve the glans/prepuce before involving the urethra, while all GUP believed that urethral disease could exist in isolation (p = 0.007).

CONCLUSIONS: There was significant disagreement in this specialized cohort of pathologists when diagnosing GLS. A logical first step appears to be improving agreement on how to best describe and classify the disease and characterize possible differences in histological changes between skin and GLS. Specialty-wide efforts to routinely collect and analyze urethral stricture specimens may aid in understanding pathophysiologies that continue to elude urologists and pathologists.

Source of Funding: None